

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method for providing continuous data protection, the method comprising the steps of:

duplicating writes made to a primary volume to a secondary volume;

mapping the writes between the primary volume and the secondary volume;

and

organizing the mapping of the writes into mapping data structures wherein ~~said the structures are structured to~~ enable the primary volume to be rewound to any point in time.

2. (Currently amended) The method of claim 1 wherein writes to the secondary volume are written in sequential order according to the time ~~said the~~ writes are written to the primary volume.

3. (Original) The method of claim 1 wherein a mapping data structure is configured to keep track of changes between two points in time.

4. (Original) The method of claim 1 wherein a mapping data structure is used to selectively play back portions of a log of each write made to the secondary volume.

5. (Original) The method of claim 1 further comprising the step of merging mapping data structures together to create a new volume that is identical to the primary volume at a previous point in time.

6. (Original) The method of claim 1 further comprising the step of merging mapping data structures that have the same expiration policy to enhance system performance.

7. (Original) The method of claim 1 further comprising the step of fading out data by merging the mapping data structures thereby freeing up blocks that are no longer used.

8. (Currently amended) A method for providing continuous data protection, the method comprising the steps of:

tracking writes made to a primary volume;

duplicating the writes in sequential fashion on a secondary volume; and

organizing the mapping of the writes between the primary volume and the secondary ~~volumes~~ volume into delta maps wherein the delta maps are structured to enable the primary volume to be rewound to any point in time.

9. (Currently amended) The method of claim 8 wherein writes to the secondary volume are written in sequential order according to the time ~~said~~ the writes are written to the primary volume.

10. (Original) The method of claim 8 wherein a delta map is configured to keep track of changes between two points in time.

11. (Original) The method of claim 8 wherein a delta map is used to selectively play back portions of a log of each write made to the secondary volume.

12. (Currently amended) A system for providing continuous data protection, the system comprising:

a host computer;

a primary volume for storing data written by the host computer;

a secondary volume wherein writes made to the primary volume are sequentially duplicated onto the secondary volume; and

a data protection system configured to manage the duplication of writes to the secondary volume and to map data between the primary volume and the secondary ~~volumes~~ volume using delta maps.

13. (Currently amended) The system of claim 12 wherein writes to the secondary volume are written in sequential order according to the time ~~said~~ the writes are written to the primary volume.

14. (Currently amended) The system of claim 12 further ~~including~~ comprising a volume manager for mirroring writes to the primary volume and the secondary volume.

15. (Original) The system of claim 14 wherein the volume manager is a software module running on an intelligent storage switch.

16. (Original) The system of claim 14 wherein the volume manager is a software module running on a server.